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YOUNG WOMEN WITH AORTIC DISSECTION: INSIGHTS FROM THE INTERNATIONAL REGISTRY OF ACUTE AORTIC DISSECTION (IRAD)

ACC Poster Contributions
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Authors: *Elise M. Woznicki, Daniel Montgomery, Rossella Fattori, Eric M. Isselbacher, Christoph A. Nienaber, Linda Pape, James L. Januzzi, Truls Myrmel, Venu Gourineni, Eva Kline-Rogers, James B. Froehlich, Anna M. Booher, IRAD Investigators, University of Michigan Health System, Ann Arbor, MI*

Background: Previous analyses of acute aortic dissection (AoD) from large registry data (IRAD) have shown that most patients are male (66%) (average age 63.1 years (yrs), with women presenting at older ages than men (65.2 vs 60.3, p<0.001). Little is known about younger women (age 30-45 yrs) with AoD.

Methods: 3013 patients are included in the IRAD database (1930 Type A and 1083 Type B pts). Of these, 1001 are women. Among women,110 were age 30 - 45 yrs (69 Type A) and 891 were >45 yrs (565 type A). Univariate analyses comparing the two age groups were performed.

Results: Younger women are more likely than older to be surgically managed for Type A aortic dissection (TAAoD) (91.7% v. 79.3%, p<0.001). Younger women presented less often with stroke (0.0 vs 4.8%, p=0.028); but more often with normal CXR and ECG results (CXR: 32.9% v. 20.7%, p=0.015; ECG: 42.6% v. 29.6%, p=0.010) and require >1 confirmatory imaging study (64.8% v. 47.8%, p=0.020). Younger women were also more likely to have Marfan syndrome (p<0.001), prior aortic dissection (p=.008), bicuspid aortic valve (p<0.001) or other aortic valve disease (p=.002). Eleven out of the 110 (10%) younger women were peripartum at the time of dissection. In-hospital mortality was lower overall (TAAoD and TypeB) (11.8% v. 23.7%, p=0.005) and particularly with TAAoD (14.5% v. 31.1%, p=0.004) in young vs older women. There was no mortality difference between groups with Type B dissection. Five year follow-up mortality did not differ between younger and older women (42.9% v. 56.7%, p=.699).

Conclusion: Younger women with AoD less often present with stroke but are more likely to have known predisposing risk factors for AoD including Marfan syndrome, prior AoD and aortic valve disease, and require more testing prior to diagnosis. Younger women had lower overall mortality in hospital but no significant difference in 5-year mortality. Younger women with TAAoD were more likely to be managed surgically and had lower mortality compared to the non-surgical group. Clinicians need to be aware of historical factors associated with aortic dissection in younger pts to aid in more rapid diagnosis and treatment.